

WHAT IS CLAIMED IS:

1. A medical system for integrating data management with the process of controllably dispensing products including medications, the system comprising:

one or more dispensers configured to controllably release a product in response to a control signal;

an admission subsystem configured to maintain patient information; and

a prescription subsystem coupled to said one or more dispensers and configured to receive entry of prescription information, to relate patient information from said admission subsystem to the prescription information to initiate a determination of whether the product is appropriate for the patient, and to send a control signal to said one or more dispenser units to release the product.

2. The system of Claim 1, wherein said determination of whether the medication is appropriate for the patient comprises a pharmacy adjudication.

3. The system of Claim 1, wherein said determination of whether the medication is appropriate for the patient comprises a drug utilization review (DUR).

4. The system of Claim 1, wherein said prescription subsystem is further configured to manage and control a virtual inventory by tracking ownership and utilization of a plurality of individually owned and co-mingled inventories in said one or more dispensers.

5. The system of Claim 4, wherein access to a medication in inventory is further controlled according to ownership of the medication as tracked in said virtual inventory.

6. The system of Claim 1, wherein said prescription subsystem is configured to manage and control a physical inventory by sending a reorder message to reorder a product when an inventory level is at a predefined level.

7. The system of Claim 6, wherein the predefined level comprises a par inventory level.

8. The system of Claim 6, wherein the predefined level comprises a dynamic par level that is based upon medical office product usage data.

9. The system of Claim 1, wherein said admission subsystem generates a patient specific drug benefit profile used in prescribing the medication.

10. The system of Claim 1, further comprising a sample management subsystem configured to track the distribution of a sample medication to a patient, to associate information gathered from the distribution of the sample medication with said patient information, to initiate a determination of whether the medication is appropriate for the patient, and to send a control signal to said one or more dispenser units to release a sample medication.

11. The system of Claim 1, further comprising, a patient care subsystem configured to relate said patient information to data collected from the dispensing of an office administered medication and to send a control signal to said one or more dispenser units to release a product.

12. The system of Claim 1, further comprising an over-the-counter subsystem configured to relate said patient information to data collected from the dispensing of an over the counter product, further configured to send a control signal to said one or more dispenser units to release the over the counter product.

13. The system of Claim 1, wherein the medication is dispensed at the point of care.

14. The system of Claim 1, further comprising a central server connected via a network to said prescription subsystem and configured to receive and process said determination of whether the medication is appropriate for the patient.

15. The system of Claim 14, wherein said central server is coupled to an enterprise resource planning system having an accounting module configured to track finances and collection of money, an inventory module configured to manage physical and virtual product inventories, a purchasing module configured to automatically process purchase requests, and a fulfillment module configured to manage product order requests.

16. A medical product dispensing system for integrating data management with the process of controllably dispensing medical products at the point of care, comprising:

one or more dispensers configured to controllably grant access to a product in response to a control signal;

an admission subsystem configured to collect and maintain patient information;

a prescription subsystem for receiving entry of prescription information, for relating patient information from said admission subsystem to the prescription information to initiate a determination of whether the medication is appropriate for the

patient, and for sending a control signal to said one or more dispenser units to release a product;

a sample management subsystem configured to track the distribution of a sample medication to a patient, to associate information gathered from the distribution of the sample medication with said patient information to initiate a determination of whether the sample medication is appropriate for the patient, and to send a control signal to said one or more dispenser units to grant access to the sample medication;

a marketing subsystem configured to associate said patient information with said information from at least one other subsystem thereby determining appropriate marketing information to transmit; and

a point of sale subsystem configured to manage payment information.

17. The medical product dispensing system of Claim 16, wherein said sample management subsystem is further configured to relate patient information from said admission subsystem to the prescription information and to initiate a drug utilization review (DUR) to determine whether the sample medication is appropriate for the patient.

18. The medical product dispensing system of Claim 17, further comprising a central server connected via a network to said prescription subsystem, said sample management subsystem, and said marketing subsystem and further configured to receive and process said determination of whether the medication is appropriate for the patient.

19. The medical product dispensing system of Claim 18, wherein said central server is configured to receive and process a drug utilization review (DUR).

20. The medical product dispensing system of Claim 18, wherein said central server is configured to maintain data or information in a database, and said central server is coupled to an information distribution subsystem that is configured to generate and display reports from said data to users.

21. The medical product dispensing system of Claim 16, further comprising physical and virtual inventory control and management.

22. A medication dispenser for integrating data management with the process of controllably dispensing a product at the point of care, comprising:

one or more product cabinets configured to controllably release a product in response to a control signal from a prescription subsystem;

an admission subsystem configured to collect patient information; and

a prescription subsystem configured to receive entry of prescription information and to relate the patient information to the prescription information to initiate a determination of whether the product is appropriate for the patient, further configured to transmit a control signal to the one or more product cabinets to permit access to the product.

23. The medication dispenser of Claim 22, further comprising a marketing subsystem configured to track and report use of the product and to associate said patient information with said use of the product thereby determining appropriate marketing information to direct to an individual dispensing the product and/or said patient.

24. A system for integrating data management with the process of dispensing a sample medication, comprising:

one or more dispensers configured to controllably release a sample medication in response to a control signal from a sample management subsystem;

an admission subsystem configured to collect patient information; and

a sample management subsystem configured to determine a sample medication for a patient and to track sample medication usage, and to transmit a dispense signal to the one or more dispenser units.

25. The system of Claim 24, wherein said sample management subsystem further is configured to initiate a drug utilization review of the sample medication prior to transmitting a dispense signal to the one or more dispenser units.

26. The system of Claim 24, wherein said sample management subsystem further is configured to track dispensing of said sample medication and to compile and provide sample usage reports to a user.

27. The system of Claim 24, further comprising a marketing subsystem configured to track and report the use of the sample medication and to associate said patient information with

said use of the sample medication thereby determining appropriate marketing and educational information to direct to an individual dispensing the sample medication and/or said patient.

28. The system of Claim 24, comprising a central server connected via a network to said sample management subsystem, wherein said central server receives tracked sample medication usage information from said sample management subsystem and wherein said central server makes said sample management usage information available to an authorized user.

29. The system of Claim 28, wherein said authorized user is a pharmaceutical company representative.

30. The system of Claim 28, wherein said authorized user is a medication supplier.

31. A system for integrating data management with the process of dispensing products at the point of care, comprising:

a patient information database configured to maintain patient information;

one or more dispensers configured to dispense a product in response to a control signal from a prescription module; and

a prescription module to receive a prescription for the product and to initiate an adjudication check for the product utilizing said patient information, further to transmit the control signal to said one or more dispensers to release the product.

32. The system of Claim 31, further comprising an inventory management module to control and manage the inventory of the product.

33. The system of Claim 32, wherein said prescription module further manages and controls a virtual inventory by tracking ownership and utilization of a plurality of individually owned but co-mingled inventories in said one or more dispensers.

34. The system of Claim 33, wherein the product is released to a user in response to the control signal based upon the user having product in virtual inventory.

35. A system for integrating data management with the process of controllably dispensing products at the point of care, comprising:

a patient information database configured to maintain patient information;

one or more dispensers configured to controllably dispense a product in response to a control signal from a prescription module; and

a prescription module to receive a prescription for the product and to initiate an adjudication check for the product utilizing said patient information, further to transmit the control signal to said one or more dispensers to release the product; and

an inventory management module to control and manage the inventory of the product.

36. The system of Claim 35, wherein said inventory management module is configured to control and manage a physical inventory and a virtual inventory for the product.

37. The system of Claim 36, wherein said inventory management module is configured to manage and control said virtual inventory by tracking ownership and utilization of a plurality of individually owned and co-mingled product inventories in said one or more dispensers.

38. The system of Claim 37, wherein access to a product in inventory is further controlled according to ownership of the product as tracked in said virtual inventory.

39. The system of Claim 36, wherein said inventory management module is configured to manage and control a physical inventory by sending a reorder message to reorder a product when an inventory level is at a predefined level.

40. The system of Claim 39, wherein the predefined level comprises a par inventory level.

41. The system of Claim 40, wherein the predefined level comprises a dynamic par level that is based upon medical office product usage.

42. The system of Claim 39, further comprising a central server connected via a network to said inventory management module, and said central server is connected to an ERP subsystem that is configured to receive and process the reorder message.

43. A system for dispensing a medical product and for controlling a virtual inventory comprising:

one or more dispensers to controllably release a medical product in response to a control signal; and

a prescription subsystem configured to manage and control a co-mingled physical inventory of a plurality of individually owned medical products and to send a dispense

signal to said one or more dispensers to release a medical product to a user based upon the user having the medical product in a virtual inventory.

44. A medical system for integrating data management with the process of controllably dispensing a product, including a medication, the system comprising:

one or more dispensers configured to controllably release a product in response to a control signal;

an admission subsystem configured to maintain patient information;

a prescription subsystem coupled to said one or more dispensers and configured to receive prescription information, to relate patient information from said admission subsystem to the prescription information, to initiate a pharmacy adjudication request, and to send a control signal to said one or more dispenser units to release a product; and

a central system comprising a central server connected via a network to said prescription subsystem and configured to receive and process the pharmacy adjudication request.

45. The system of Claim 44, wherein said central system comprises an enterprise resource planning subsystem coupled to said central server and said enterprise resource planning subsystem having an accounting module configured to track finances and collection of money, an inventory module configured to manage physical and virtual product inventories, a purchasing module configured to automatically process purchase requests, and a fulfillment module configured to manage product order requests.

46. The system of Claim 44, wherein said central system comprises a pharmacy subsystem, wherein said pharmacy system is configured to adjudicate a pharmacy adjudication request.

47. The system of Claim 44, wherein said central system comprises a support subsystem connected to said central server, wherein said support subsystem is configured to manage and control user training and learning modules.

48. The system of Claim 44, wherein said central system comprises a website connected to said central server, wherein said website is configured to provide controlled user access to system information.

49. The system of Claim 48, wherein said system information is selected from the group consisting of a financial report, an inventory report, a usage report, a regulatory report, a sales report, an order management report, and a business report.

50. The system of Claim 44, further comprising a front office server coupled to said one or more dispensers and comprising said admission subsystem and said prescription subsystem, said front office server configured to serve patient information.

51. The system of Claim 44, wherein said central server is configured to provide content to a marketing subsystem.

52. The system of Claim 44, wherein said central system performs system maintenance and monitoring.

53. A method for dispensing a medical product at the point of care comprising:  
receiving a prescription request for a medical product for a patient;  
transmitting the prescription request for adjudication by comparing patient information with prescription information for the medical product to determine whether the medical product is appropriate for the patient;  
releasing said medical product from a controlled dispenser; and  
sensing removal of the medical product from the controlled dispenser.

54. The method of Claim 53, further comprising verifying that the correct medical product is taken.

55. The method of Claim 53, further comprising manually sending refill information to a pharmacy or medical product supplier.

56. The method of Claim 53, further comprising electronically sending refill information to a pharmacy or medical product supplier.

57. A method for controllably dispensing a medication and integrating data management comprising:

receiving a prescription for a medication;  
initiating an adjudication check, said adjudication check comprising comparing patient information with prescription information for the medication to determine whether the medication is appropriate for the patient;



providing clinical or marketing information related to the prescription to a user or the patient;

making said medication available to the user;

sensing the taking of the medication ; and

verifying that the correct medication is dispensed.

58. The method of Claim 57, wherein the sensing the taking comprises electronically sensing the taking of the medication.

59. The method of Claim 57, wherein verifying that the correct medication is taken comprises receiving medication package information and comparing said medication package information to stored information on the system.

60. The method of Claim 57, wherein the medication information is received by scanning a bar code on the medication package.

61. A method for dispensing a medical product and integrating data management comprising:

receiving a request for a medical product;

providing clinical or marketing information related to the request to a user or a patient;

making said medical product available to the user;

sensing the taking of the medical product from a controlled dispenser; and

verifying that the correct medical product is taken from the controlled dispenser.

62. The method of Claim 61, further comprising initiating an adjudication check, said adjudication check comprising comparing patient information with request information for the medical product to determine whether the medical product is appropriate for the patient.

63. A method for inventory management and control of a plurality of individually owned product that is co-mingled in a controlled dispenser unit, comprising:

storing in a controlled dispenser unit a plurality of individually owned product for more than one inventory owner;

receiving inventory data for each individual inventory owner;

tracking the dispensing of a product owned by the individual inventory owner from the controlled dispenser unit;

updating the inventory data; and

controllably dispensing the product based upon the inventory data for the individual inventory owner.

64. A method for controlling access to a plurality of individually owned product that is co-mingled based upon virtual inventory, comprising:

storing together in a controlled dispenser a plurality of individually owned product for more than one inventory owner;

tracking the inventory level of the individually owned product for each inventory owner;

granting access to an individual inventory owner to a product based upon the inventory level of the individual inventory owner.

65. A method for providing information used in prescribing a medication at the point of care using a patient specific benefit profile, the method comprising:

generating a patient specific drug benefit profile integrating patient specific information, benefit profile, and inventory status; and

displaying said patient specific benefit profile to a user.

66. The method of Claim 65, wherein said patient specific drug benefit profile is displayed on a handheld computer, a printout, a desktop computer, or a laptop computer.